IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Doktor, Karol		
Assignee:	Financial Systems Technology Pty. Ltd.		
Title:	EASILY EXPANDABLE DATA PROCESSING SYSTEM AND METHOD		
Serial No.:	08/862,176	Filed:	May 22, 1997
Batch No.:	B31	Date Allowed:	March 5, 1998
Examiner:	R. Ho	Group Art Unit:	2771
Docket No.:	M-1226-5C US		

RECEIVED
Publishing Division
MAY 11 1998
16

San Jose, California
May 7, 1998

BOX ISSUE FEES
Attn: Official Draftsman
COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D. C. 20231

SUBMISSION OF FORMAL DRAWINGS

Dear Sir:

Applicant submits nineteen (19) sheets of formal drawings, consisting of Figures 1A, 1B, 2A-1, 2A-2, 2B-1, 2B-2, 3-1, 3-2, 4A, 4B, 5, 6A, 6B, 7-1, 7-2, 8, 9-1, 9-2 and 10, in the above-named application. If there are any questions regarding these drawings, please call the undersigned at (408) 453-9200.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231,

on May 7, 1998.

Attorney for Applicant(s) — Date of Signature: 5/7/98

Respectfully submitted,

Edward C. Kwok
Attorney for Applicant
Reg. No. 33,938

LAW OFFICES OF
SKJERVEN, MORRILL,
MacPHERSON, FRANKLIN
& FRIEL LLP

25 METRO DRIVE
SUITE 700
SAN JOSE, CA 95110
(408) 453-9200
FAX (408) 453-7979

FTSNAP

5826259

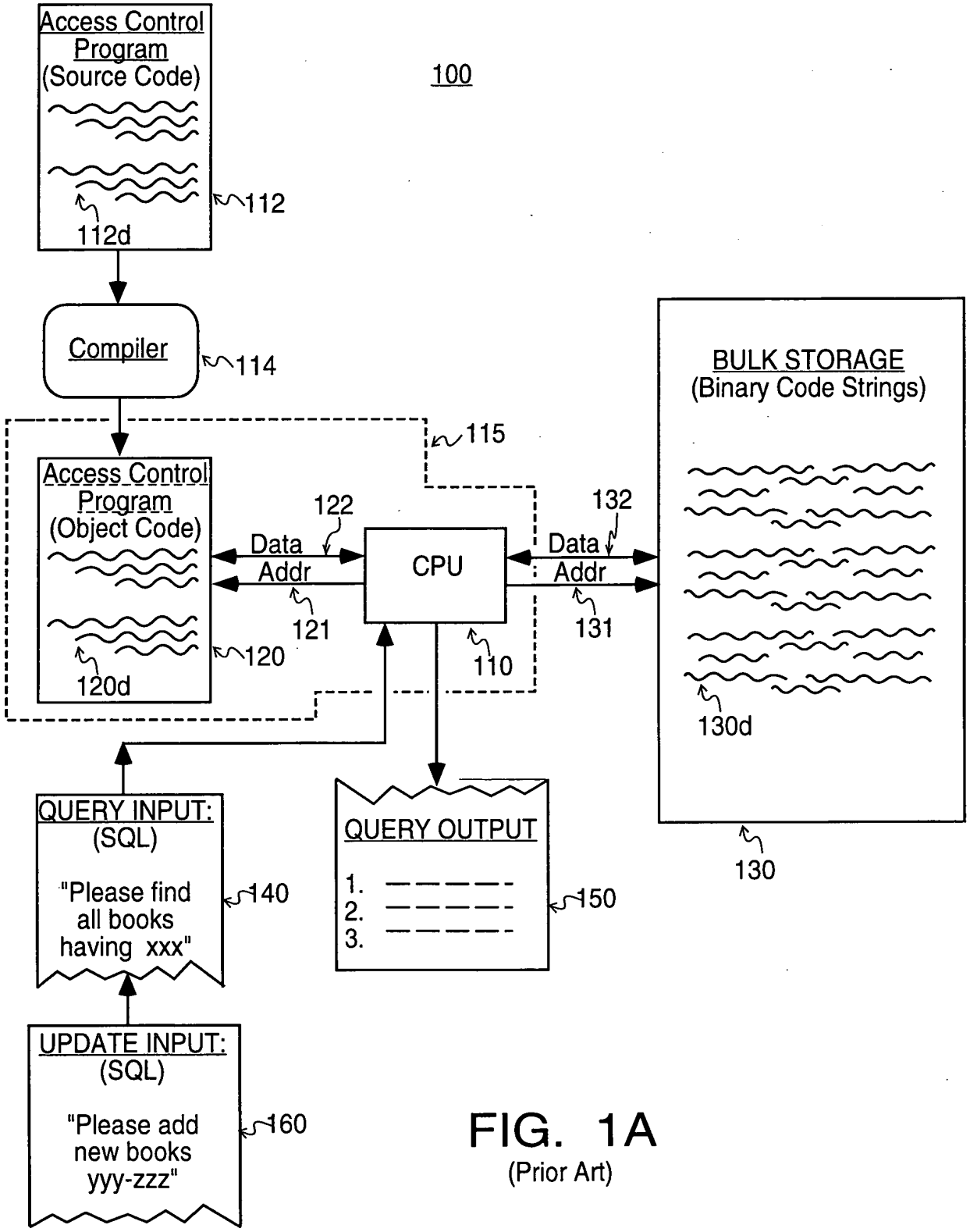


FIG. 1A
(Prior Art)

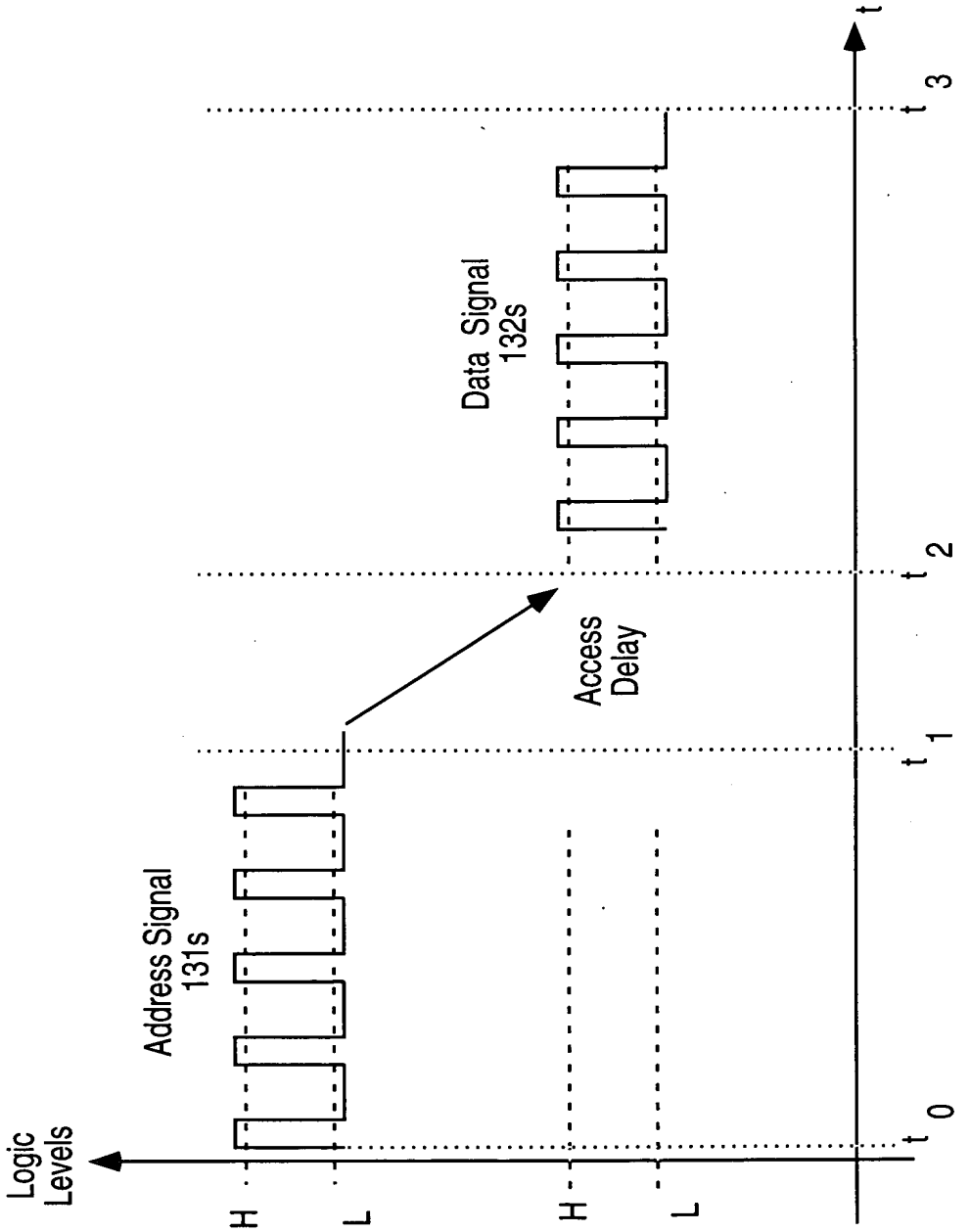


FIG. 1B
(Prior Art)

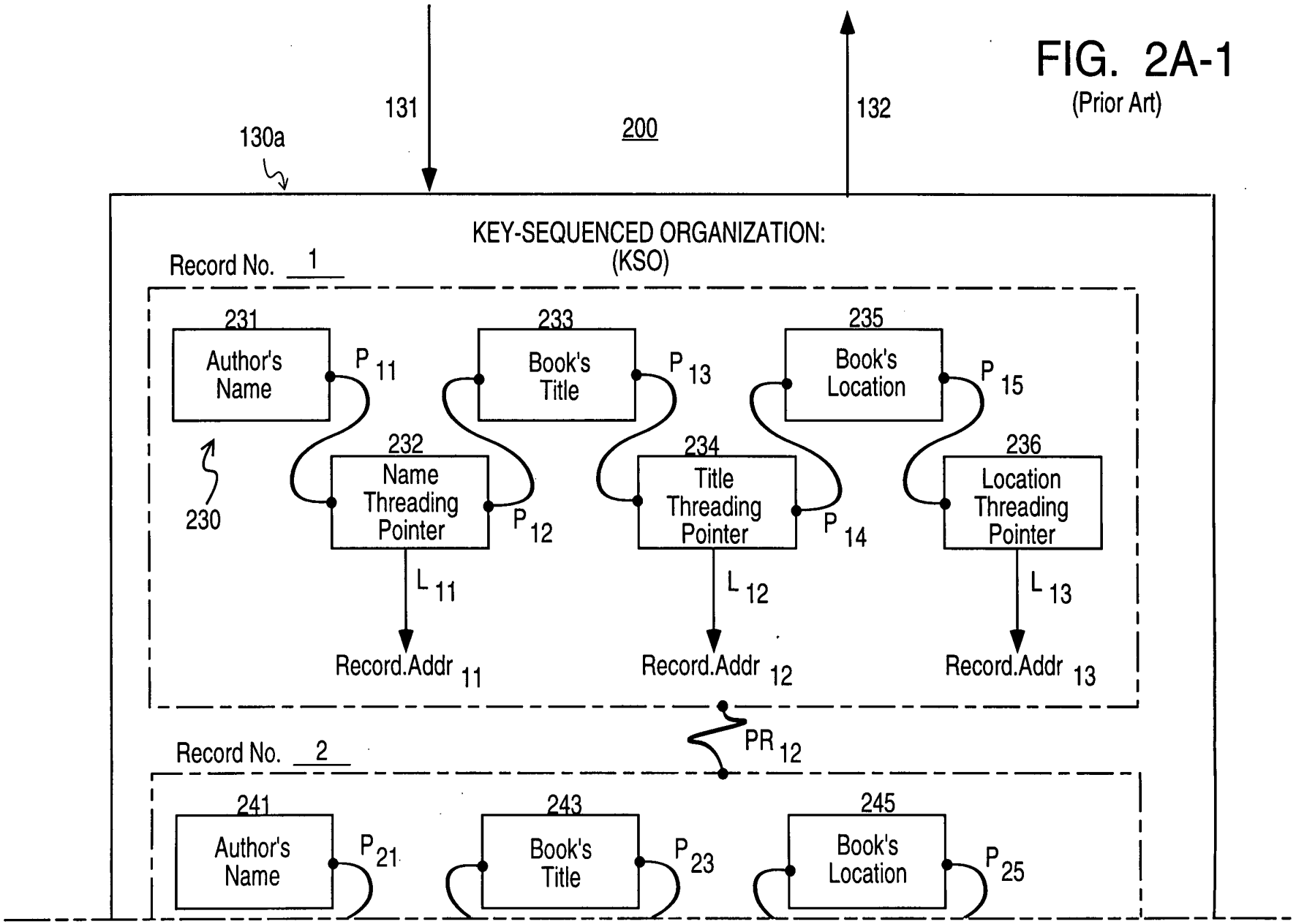


FIG. 2A-1
(Prior Art)

CLASS | SUBCLASS

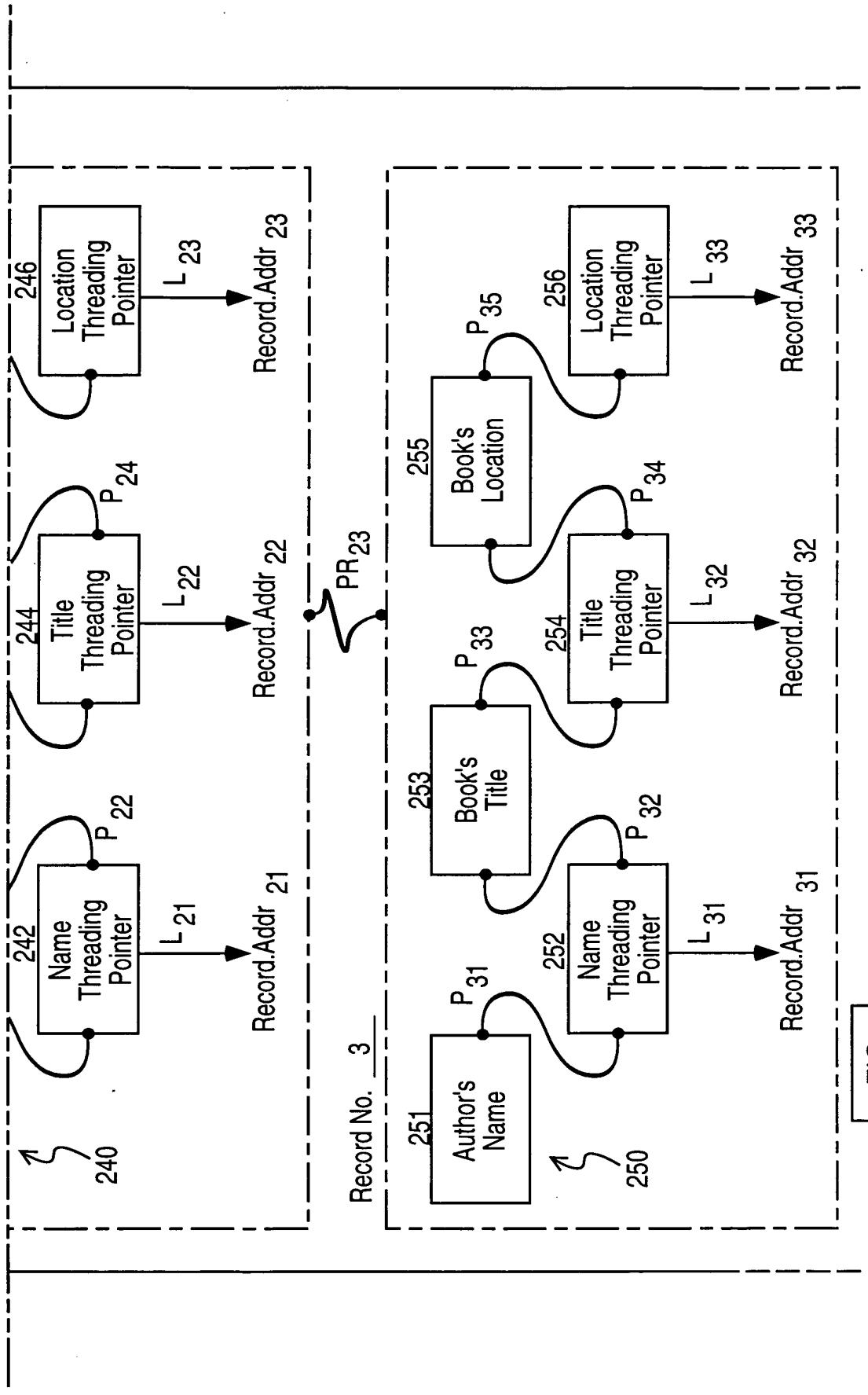


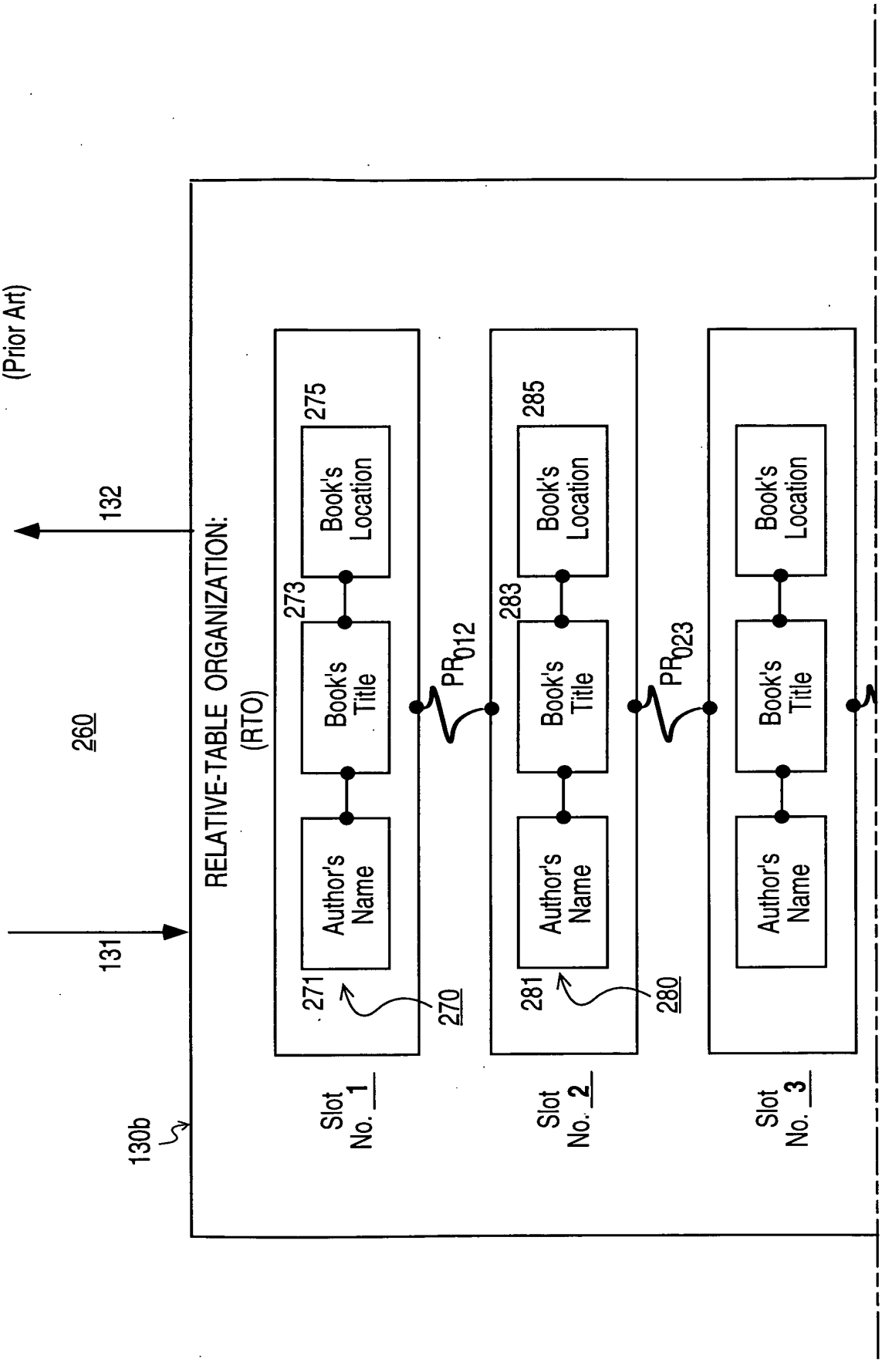
FIG. 2A-2
(Prior Art)

FIG. 2A

FIG. 2A-1
FIG. 2A-2

BY | CLASS | SUBCLASS
ART UNIT

FIG. 2B-1
(Prior Art)



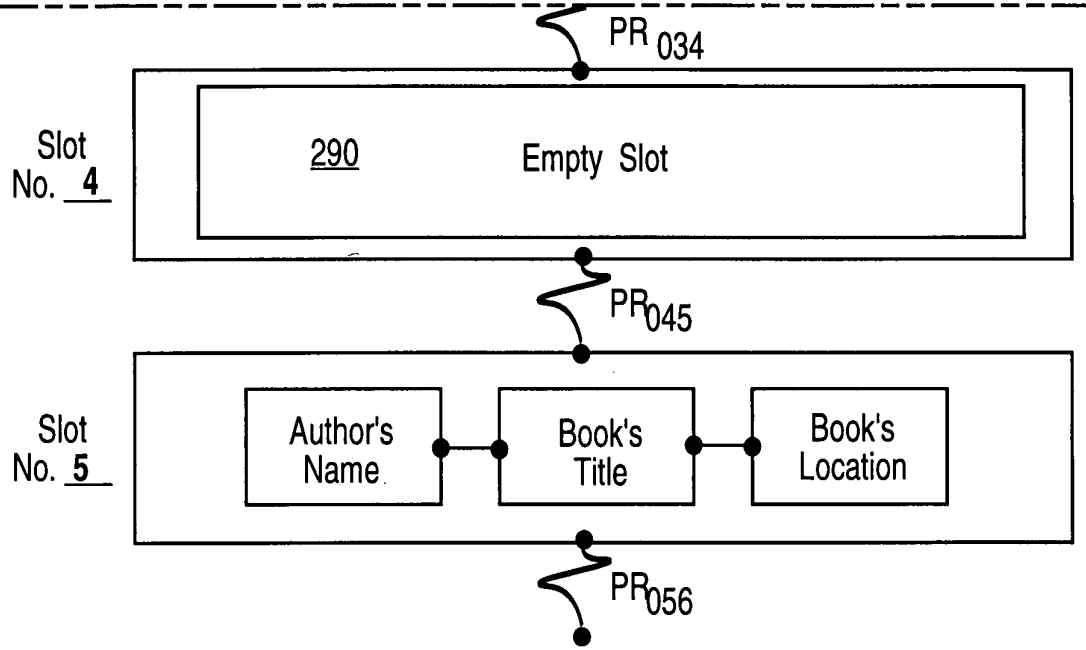


FIG. 2B-2
(Prior Art)

FIG. 2B-1
FIG. 2B-2

FIG. 2B

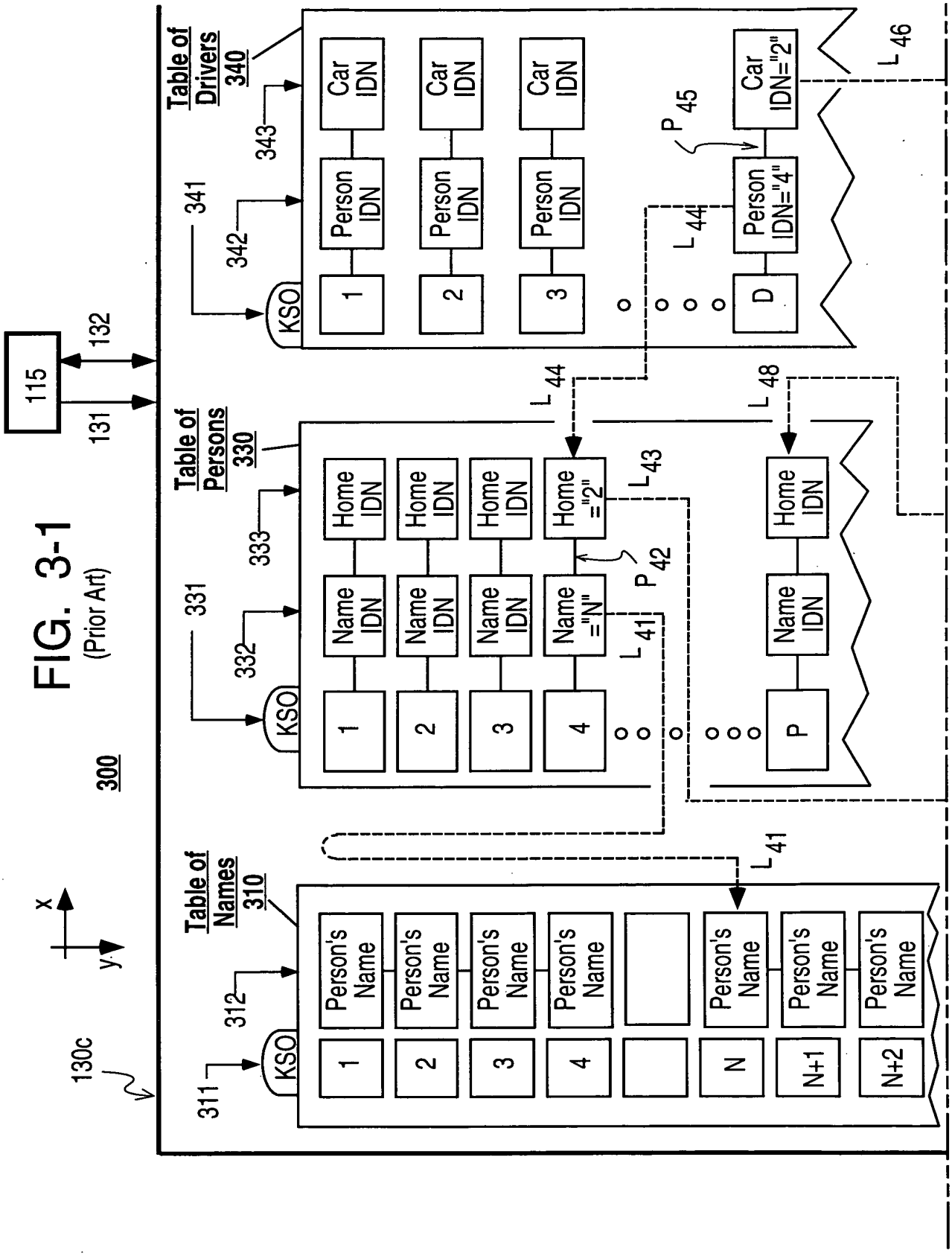


FIG. 3-1
(Prior Art)

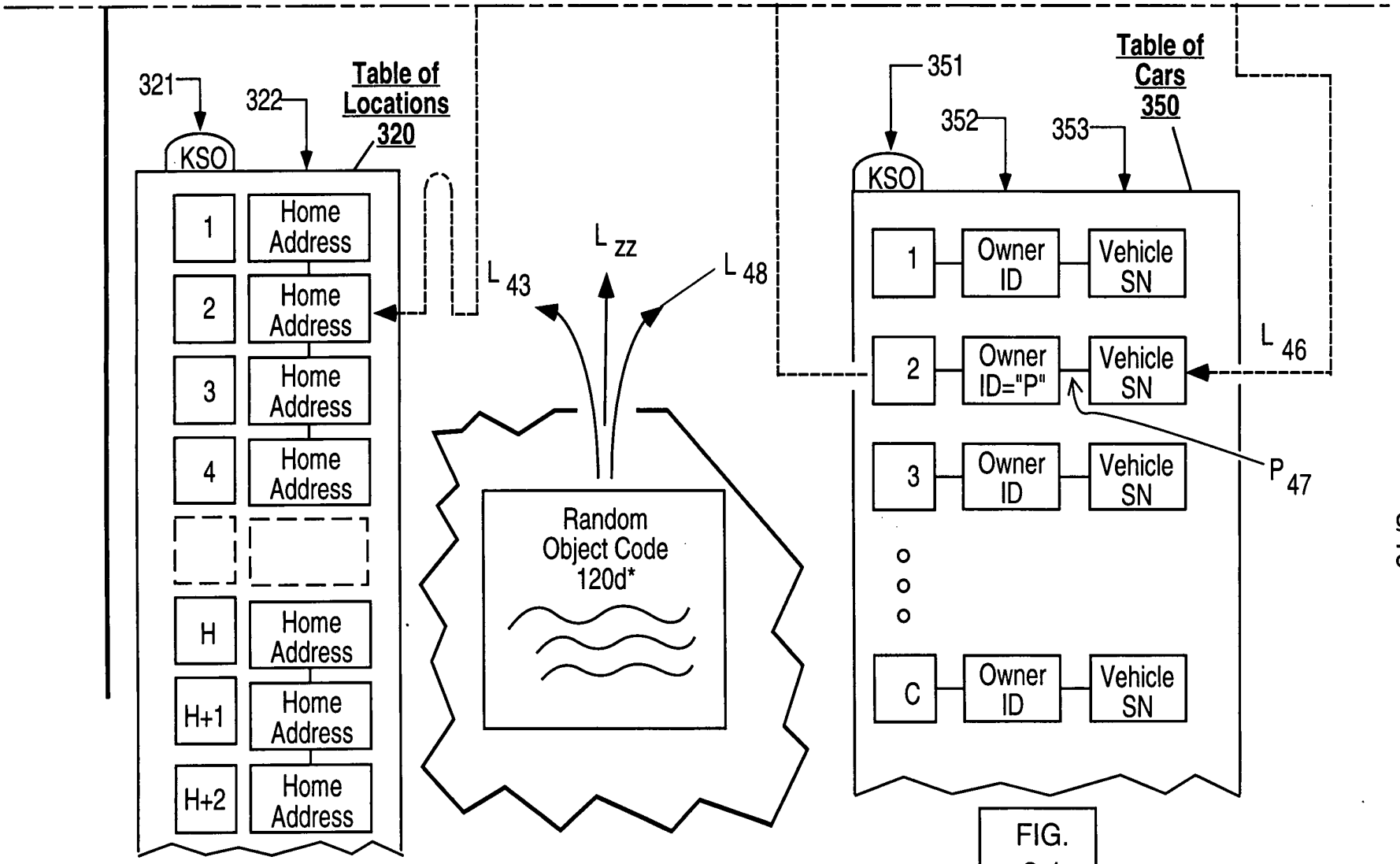
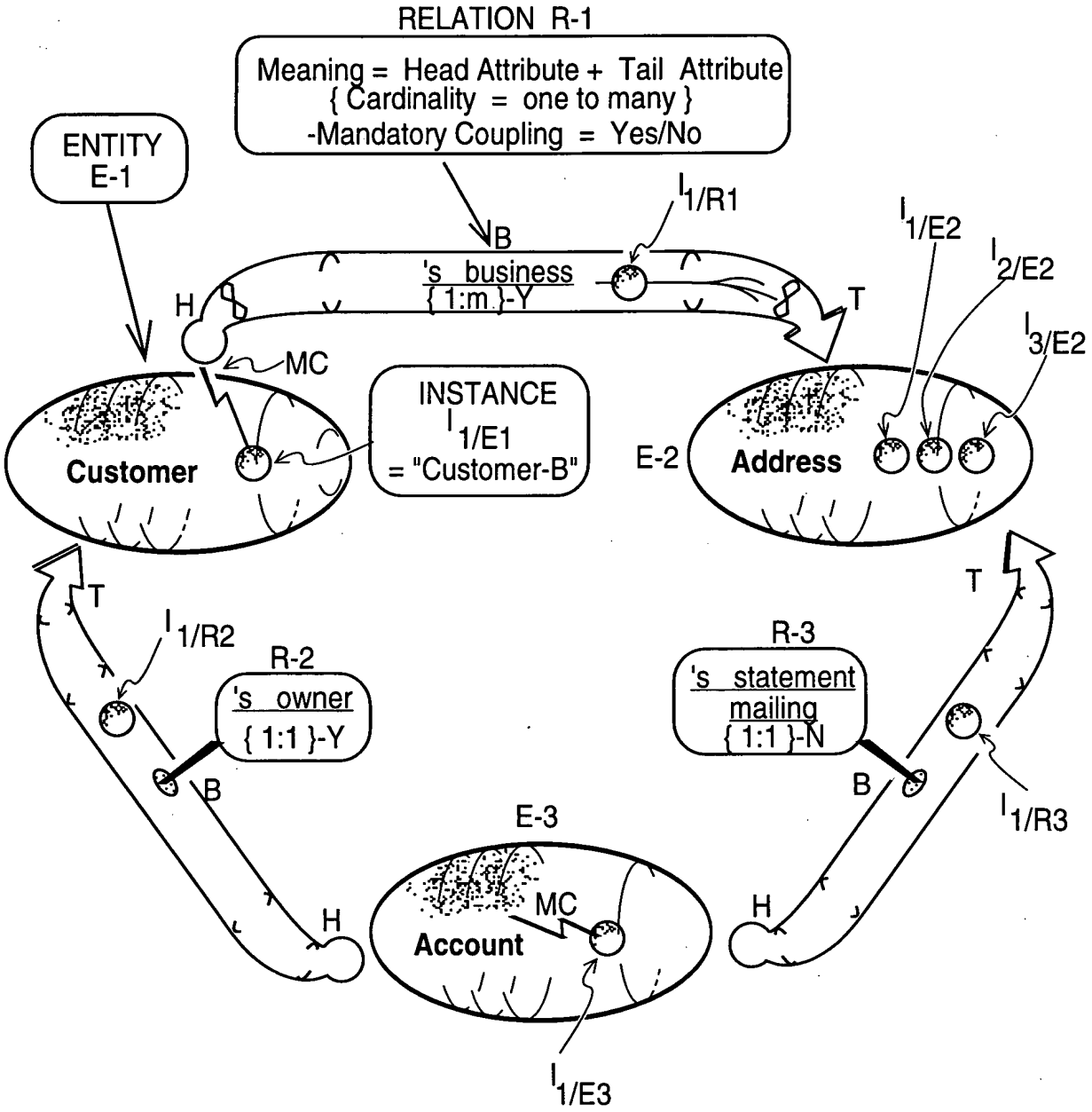


FIG. 3-2
(Prior Art)

FIG. 3-1
FIG. 3-2
FIG. 3

FIG. 4A

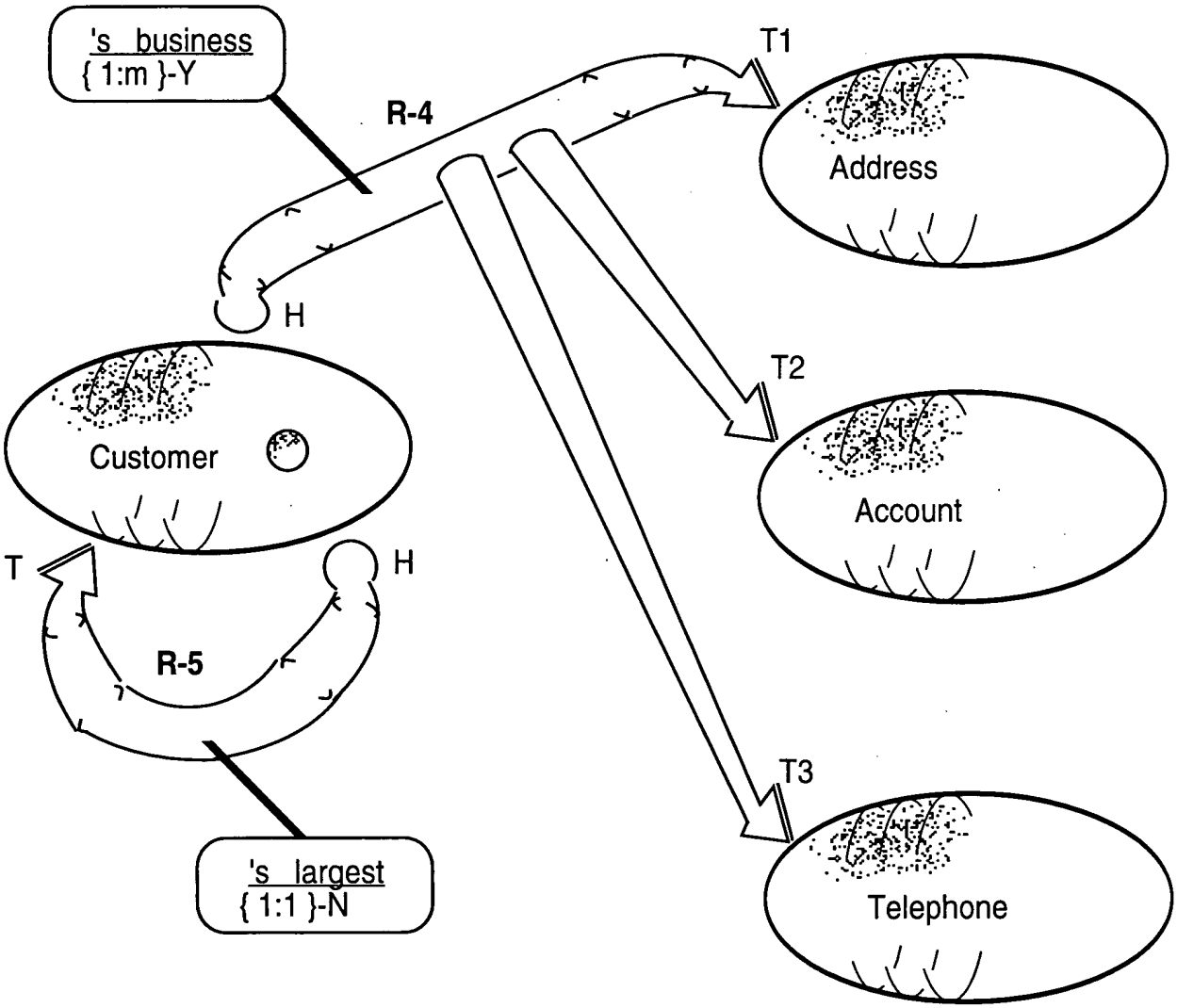
400


RELATION R-1
Meaning = Head Attribute + Tail Attribute
{ Cardinality = one to many }
-Mandatory Coupling = Yes/No
ENTITY
E-1
B
's business
{ 1:m }-Y
H
T
MC
I 1/R1
I 1/E2
I 2/E2
I 3/E2
INSTANCE
I 1/E1
= "Customer-B"
Customer
E-2
Address
T
I 1/R2
R-2
's owner
{ 1:1 }-Y
B
H
R-3
's statement
mailing
{ 1:1 }-N
T
B
I 1/R3
H
E-3
MC
Account
I 1/E3

RECEIVED BY DRAFTING

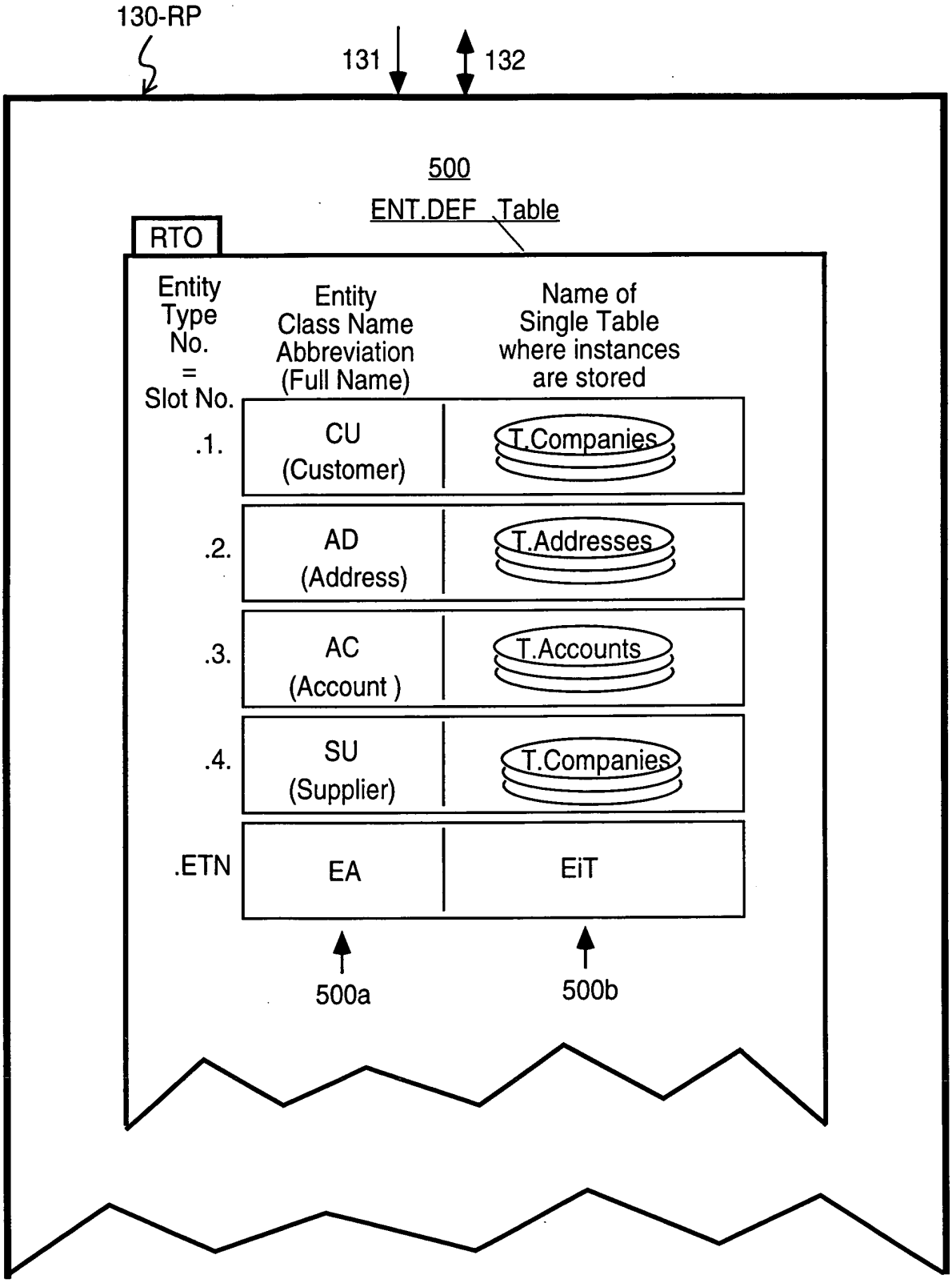
FIG. 4B

450



DRAFTSMAN | CLASS | SUBCLASS

FIG. 5



DRAFTSMAN | CLASS | SUBCLASS

FIG. 6A

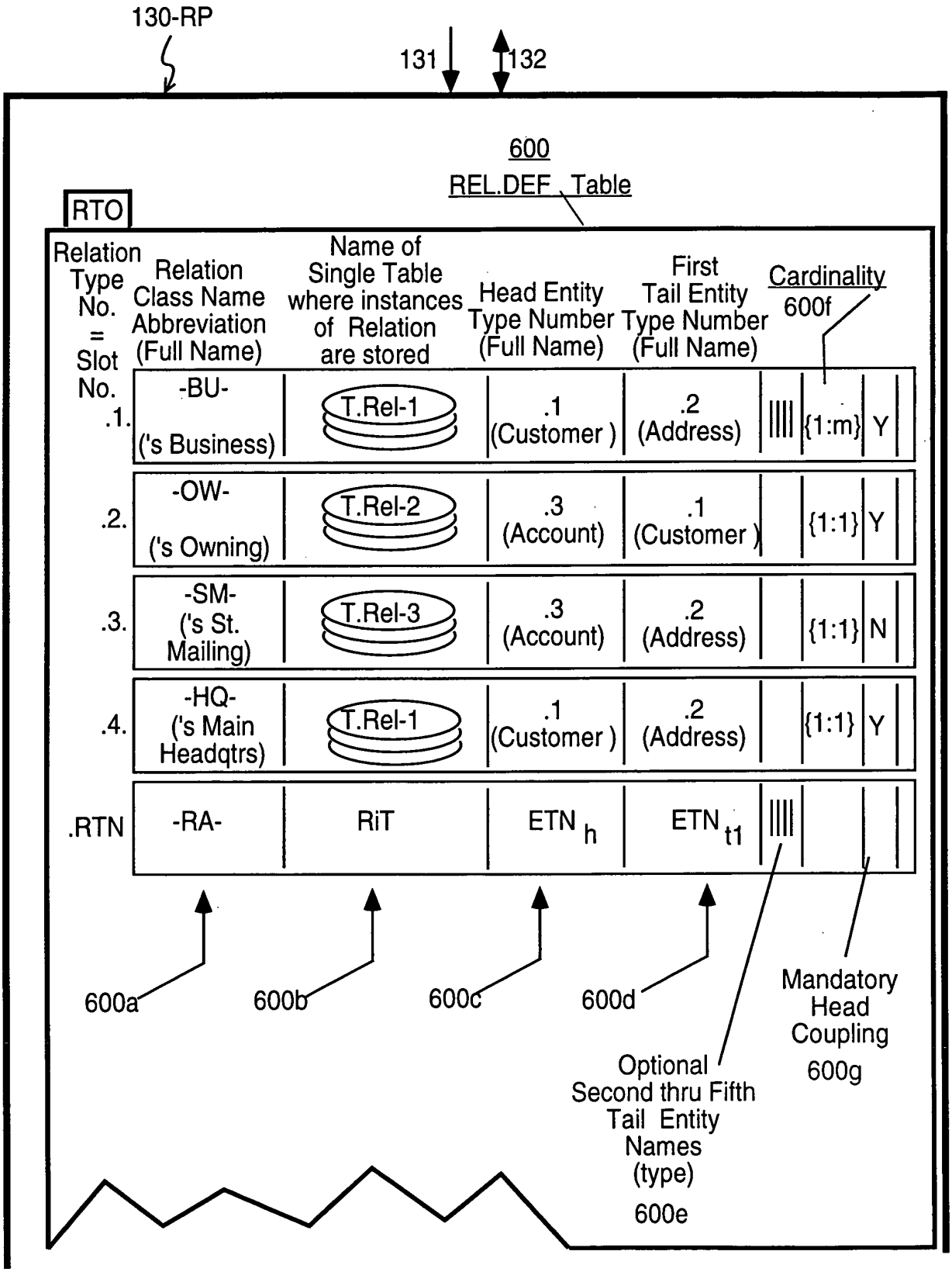
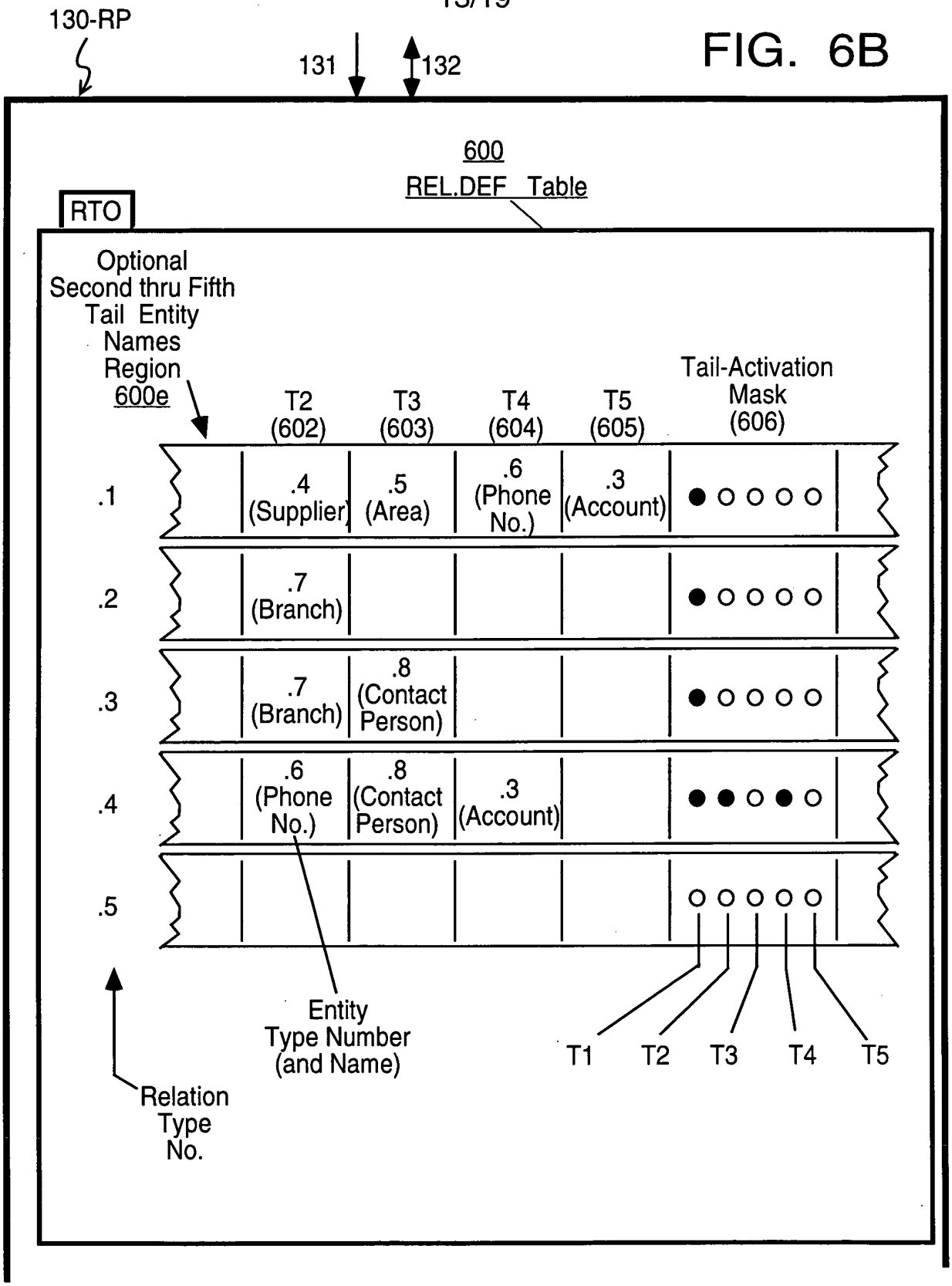


FIG. 6B


130-RP
131
132
600
REL.DEF Table
RTO
Optional Second thru Fifth Tail Entity Names Region 600e
T2 (602)
T3 (603)
T4 (604)
T5 (605)
Tail-Activation Mask (606)
.1
.4 (Supplier)
.5 (Area)
.6 (Phone No.)
.3 (Account)
.2
.7 (Branch)
.3
.7 (Branch)
.8 (Contact Person)
.4
.6 (Phone No.)
.8 (Contact Person)
.3 (Account)
.5
Entity Type Number (and Name)
Relation Type No.
T1
T2
T3
T4
T5

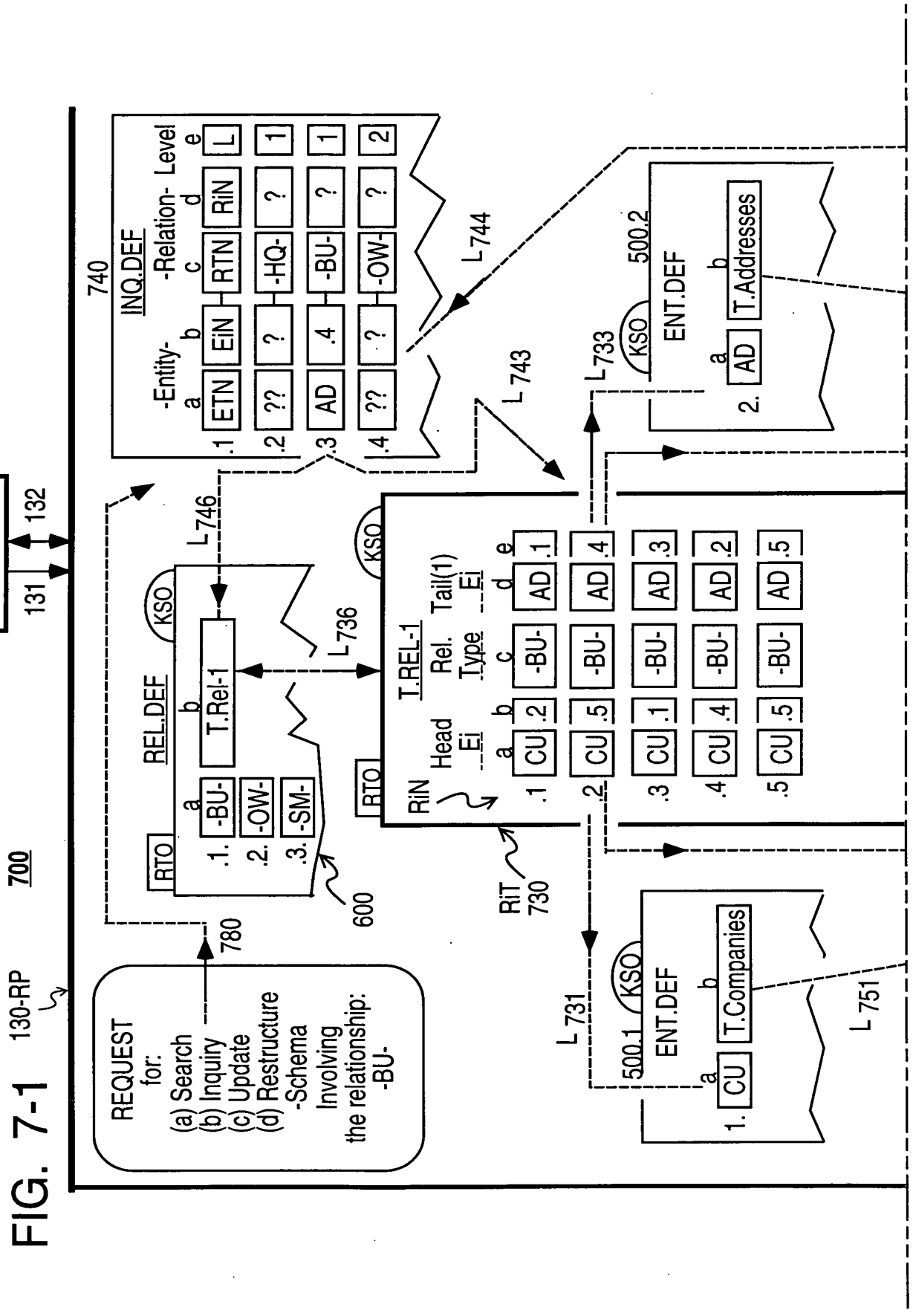

700
130-RP
815
132
131
740
INQ.DEF
-Entity-
-Relation-
Level
ETN
EiN
RTN
RiN
L
??
?
-HQ-
1
AD
.4
-BU-
2
-OW-
L 744
L 743
L 733
KSO
ENT.DEF
500.2
T.Addresses
REL.DEF
T.Rel-1
-BU-
-OW-
-SM-
RTO
L 746
L 736
600
T.REL-1
Head Ei
Rel. Type
Tail(1) Ei
CU
.1
.2
.3
.4
.5
RiN
RiT
730
780
REQUEST for:
(a) Search
(b) Inquiry
(c) Update
(d) Restructure
-Schema
Involving
the relationship:
-BU-
L 731
500.1
T.Companies
L 751

FIG. 7-1

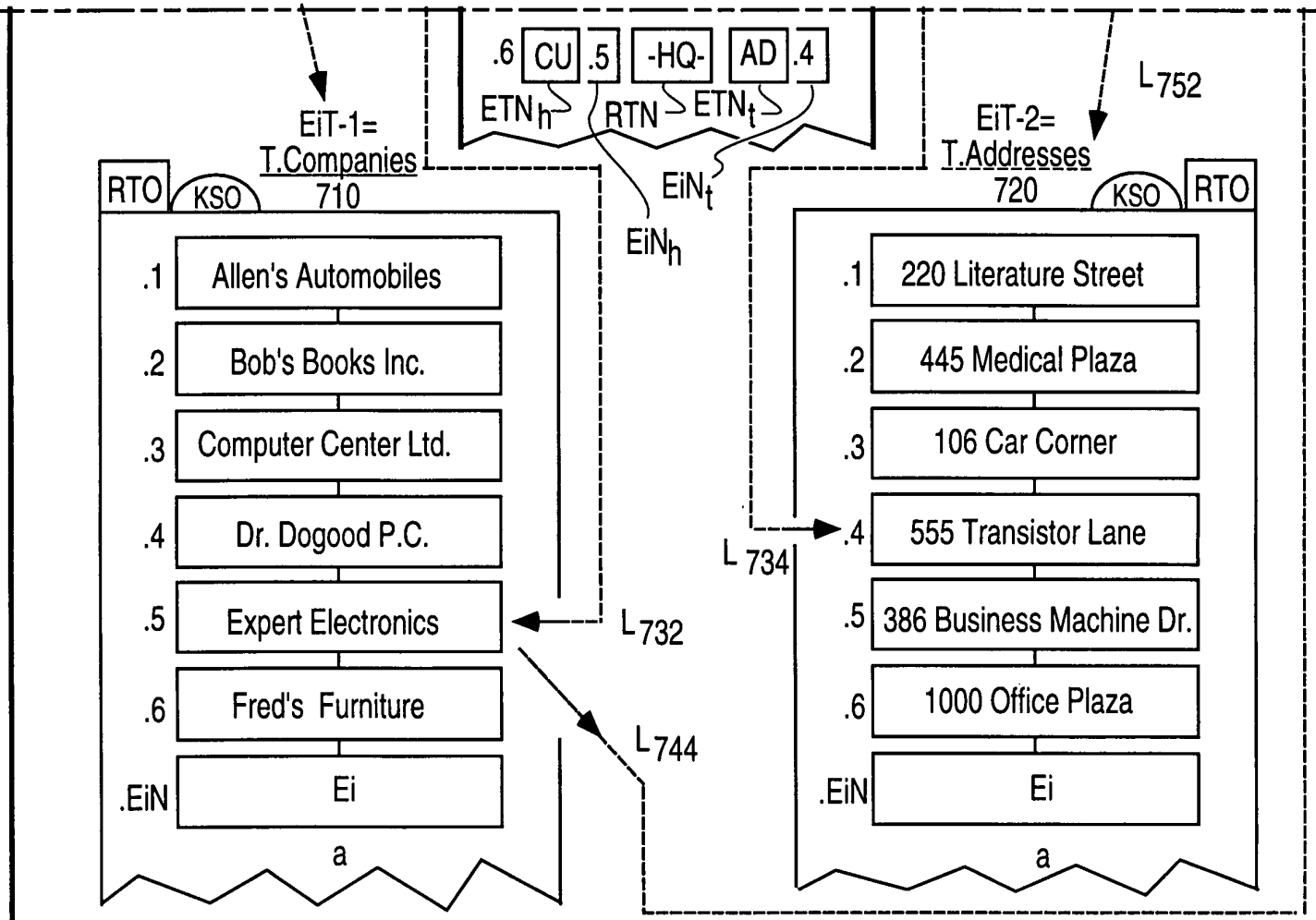


FIG. 7-2

FIG. 7-1
FIG. 7-2

FIG. 7

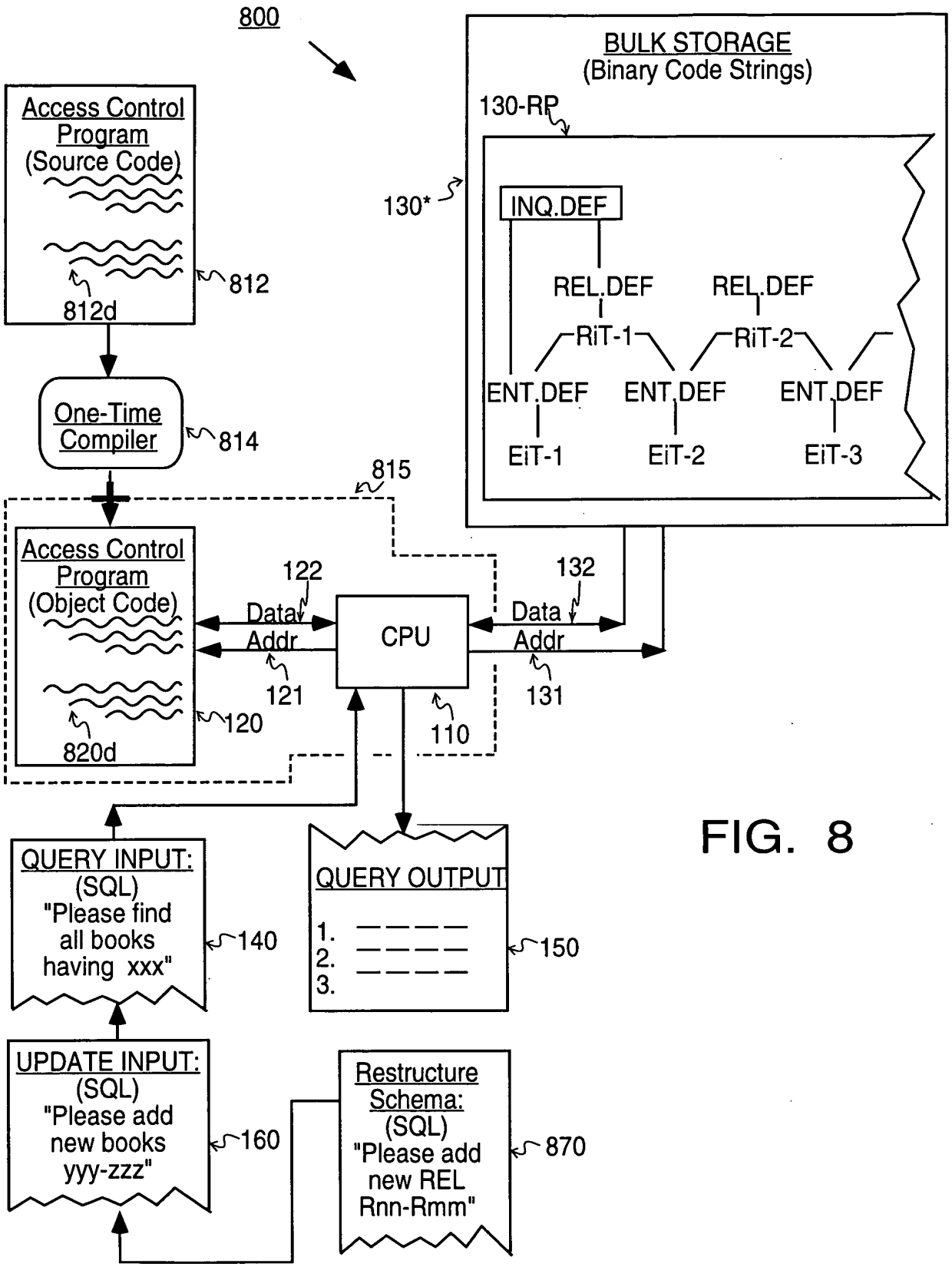
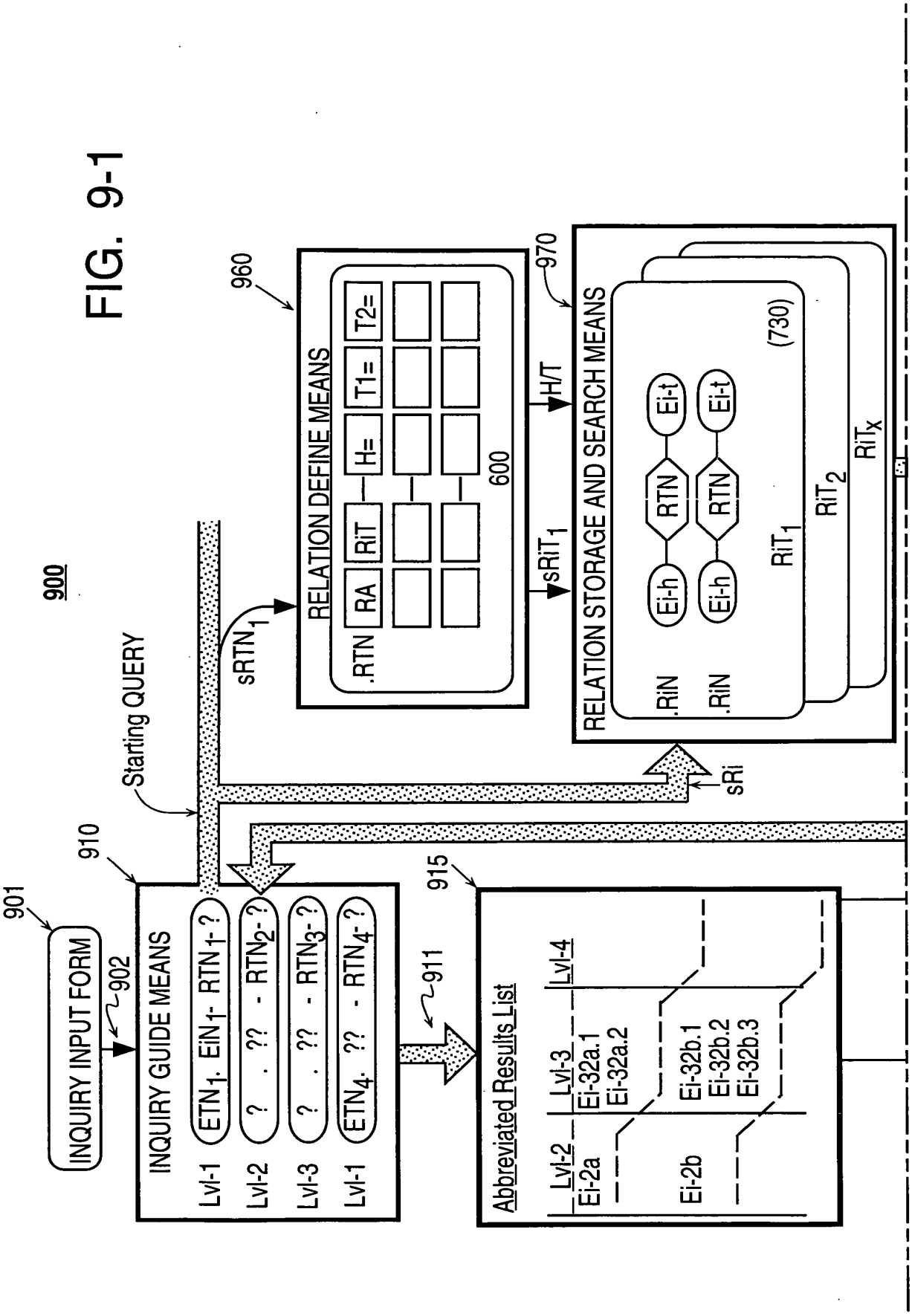

800
BULK STORAGE
(Binary Code Strings)
130-RP
130*
INQ.DEF
REL.DEF
REL.DEF
RiT-1
RiT-2
ENT.DEF
ENT.DEF
ENT.DEF
EiT-1
EiT-2
EiT-3
Access Control Program (Source Code)
812
812d
One-Time Compiler
814
815
Access Control Program (Object Code)
820d
120
122
132
Data
Addr
Data
Addr
121
131
CPU
110
QUERY INPUT: (SQL) "Please find all books having xxx"
140
QUERY OUTPUT
1.
2.
3.
150
UPDATE INPUT: (SQL) "Please add new books yyy-zzz"
160
Restructure Schema: (SQL) "Please add new REL Rnn-Rmm"
870

FIG. 8

FIG. 9-1


900
901
INQUIRY INPUT FORM
902
910
INQUIRY GUIDE MEANS
Lvl-1 ETN1. EiN1- RTN1- ?
Lvl-2 ? . ?? - RTN2- ?
Lvl-3 ? . ?? - RTN3- ?
Lvl-1 ETN4. ?? - RTN4- ?
911
915
Abbreviated Results List
Lvl-2 Lvl-3 Lvl-4
Ei-2a Ei-32a.1 Ei-32a.2
Ei-2b Ei-32b.1 Ei-32b.2 Ei-32b.3
Starting QUERY
sRTN1
960
RELATION DEFINE MEANS
.RTN RA RiT H= T1= T2=
600
sRiT1
H/T
970
RELATION STORAGE AND SEARCH MEANS
.RiN .RiN
Ei-h Ei-h
RTN RTN
Ei-t Ei-t
RiT1 RiT2 RiTx
(730)
sRi

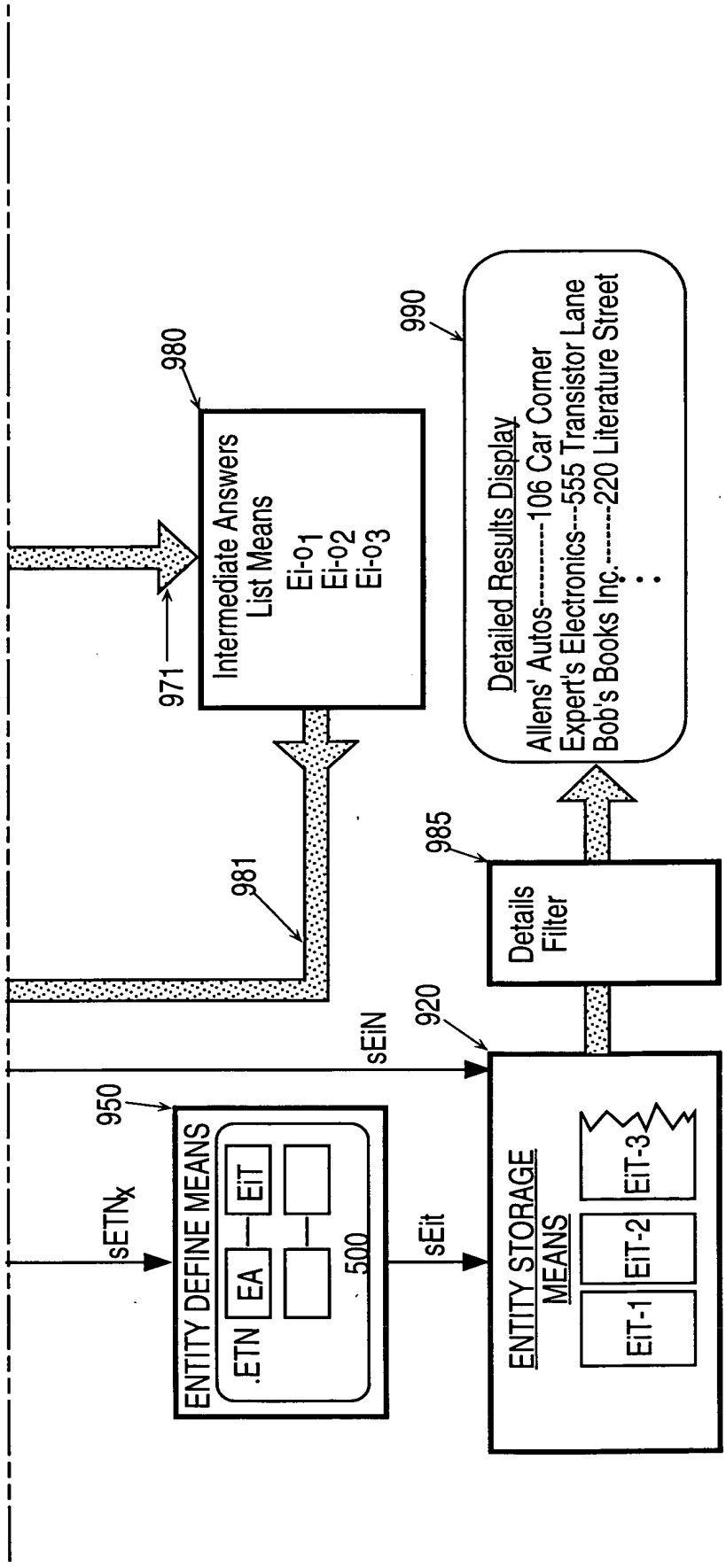


FIG. 9-2

FIG. 9

FIG. 9-1
FIG. 9-2

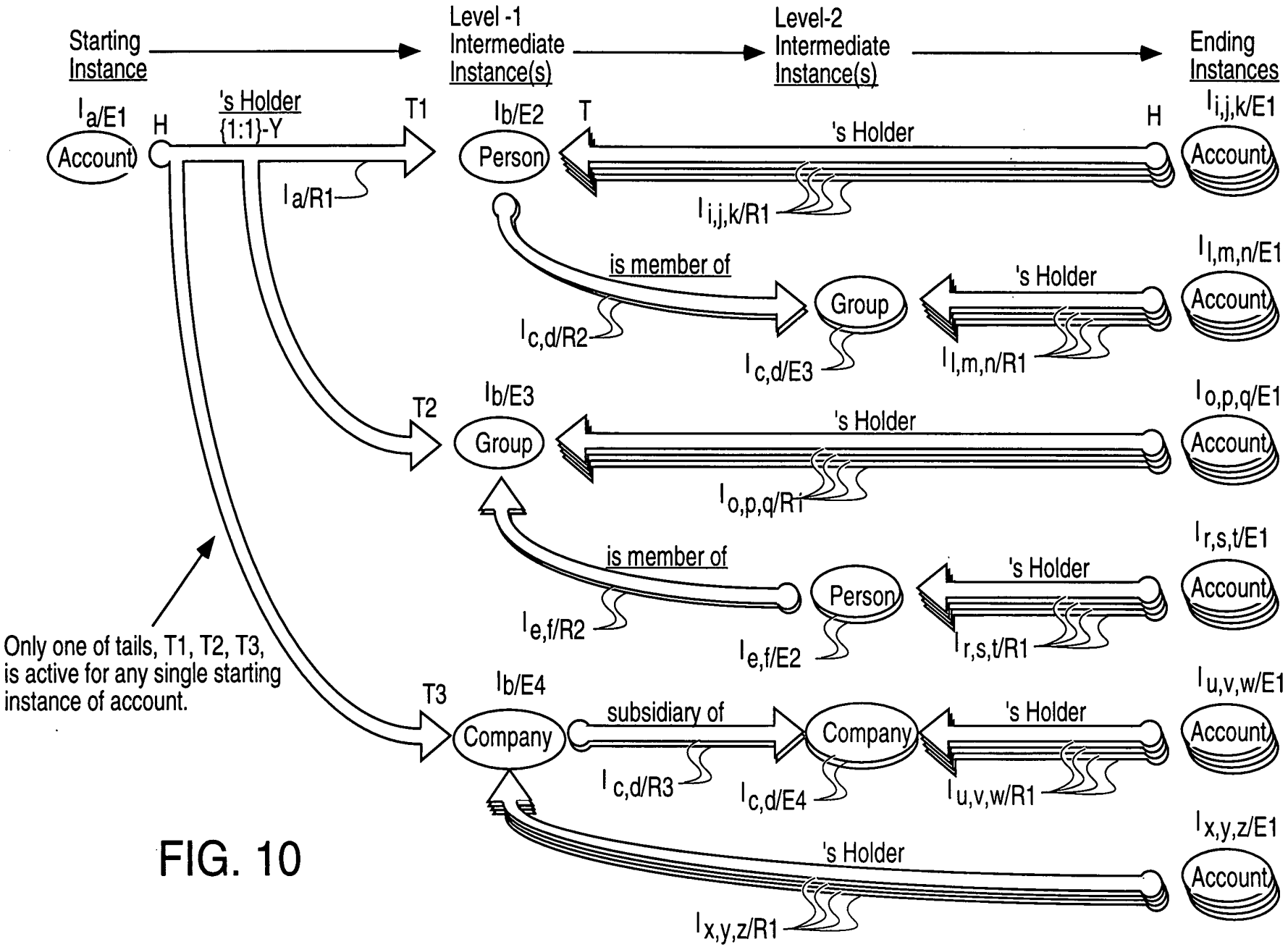

Starting Instance
Level -1 Intermediate Instance(s)
Level-2 Intermediate Instance(s)
Ending Instances
Ia/E1
Account
H
's Holder
{1:1}-Y
T1
Ia/R1
Ib/E2
Person
T
's Holder
H
Ii,j,k/E1
Account
Ii,j,k/R1
is member of
Ic,d/R2
Group
Ic,d/E3
's Holder
Il,m,n/R1
Il,m,n/E1
Account
T2
Ib/E3
Group
's Holder
Io,p,q/R1
Io,p,q/E1
Account
is member of
Ie,f/R2
Person
Ie,f/E2
's Holder
Ir,s,t/R1
Ir,s,t/E1
Account
Only one of tails, T1, T2, T3, is active for any single starting instance of account.
T3
Ib/E4
Company
subsidiary of
Ic,d/R3
Company
Ic,d/E4
's Holder
Iu,v,w/R1
Iu,v,w/E1
Account
's Holder
Ix,y,z/R1
Ix,y,z/E1
Account

FIG. 10